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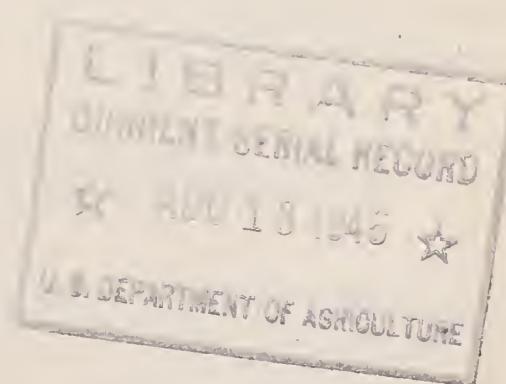
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Marketing activities



WAR FOOD ADMINISTRATION
Office of Marketing Services

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PEACETIME TASKS IN MARKETING FARM PRODUCTS

"The big post-war problem for a number of years in urban industry will be to get back into mass production of civilian goods. Selling of industrial products will be relatively less difficult. In agriculture, on the other hand, marketing problems will become of larger relative significance." This article is reprinted from the 1944 Annual Report of the Secretary of Agriculture.

PREPARING AND PACKING THE 1945 WOOL CLIP

Eleven ways for growers to get more money out of their wool.

FEDERAL MEAT INSPECTION

The Federal Meat Inspection Act provides for the inspection of slaughter houses and packing plants and of the meat products sold in interstate and foreign commerce. The inspection assures the consumer that the animal the meat came from was disease free and that the meat product is wholesome and clean.

WHAT COLOR IS COTTON?

Until we saw this, we were under the impression cotton is white. It seems we oversimplified the matter.

FRESH FRUIT AND VEGETABLE OPPORTUNITIES

By Paul M. Williams Page 26

The distributor of fresh fruits and vegetables who trims his sails now will be better equipped to weather any economic storms that may come after the war.



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Washington 25, D. C.

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Peacetime Tasks in Marketing Farm Products

... By Claude R. Wickard
Secretary of Agriculture

In the conversion from peace to war the most pressing problem on the food front was to obtain greater production of the raw materials for food. In some cases marketing facilities and materials also presented a problem, particularly for dehydrated foods and for handling the greatly expanded production of domestic oilseeds to replace the large volume of oils and oil materials previously imported. With these and other important exceptions, however, the marketing system was found to have a great deal of surplus capacity, and it was able to handle the increased output without the vast additions to processing and handling facilities that were necessary to meet our needs for other munitions of war. The really difficult war problems in food marketing were in the fields of price control and allocation of the available production.

In the reconversion from war to peace an opposite situation will be encountered. Agricultural production will be much larger than in pre-war years, and relative output of the various farm products will be geared to wartime rather than to peacetime needs. Whereas, in the case of industrial reconversion, there will be a sudden stoppage of war output and a complete shift to peacetime products for which there is a vast accumulated demand, the agricultural production plant will go on producing much the same kind of products. Experience indicates, also, that any downward adjustments in production of individual commodities to peacetime requirements will be relatively slow and difficult to effect. Under these circumstances, the marketing system will be charged with finding satisfactory outlets for at least partially continuing wartime levels of production.

It is evident, therefore, that reconversion of agriculture from war to peace will be more difficult than was the conversion to war. Moreover, reconversion difficulties will be more pronounced in agriculture than in most other industries, and more pronounced in agricultural marketing than in agricultural production. The big post-war problem for a number of years in urban industry will be to get back into mass production of civilian goods. Selling of industrial products will be relatively less difficult. In agriculture, on the other hand, marketing problems will become of larger relative significance.

Most post-war marketing problems in agriculture will be an enlargement of problems that prevailed before the war. Food production has never been sufficient to meet minimum nutritional requirements for the world's population. Nevertheless the output of many commodities has exceeded the quantities that could be disposed of on world markets at satisfactory prices. Chronic "surpluses" of food, in the face of widespread malnutrition, have long been one of the worst anomalies of

our civilization and have shown up basic weaknesses in our distribution system. If we are to take full advantage of technological progress, which makes it possible to produce adequate foods for all the peoples of the world, these weaknesses must be remedied. It will be ineffective to urge increased production unless we see to it that the food produced is properly utilized. Briefly, the problem is to avoid waste of natural and human resources devoted to the production of food supplies and, simultaneously, to insure reasonable good returns for agricultural producers through an expansion of market outlets. This over-all problem has a number of components the handling of which will require sufficiently flexible plans to meet a wide range of possible economic conditions.

Necessarily the planning job will rest partly on private marketing agencies and partly on Government agencies. Unavoidably, the war has produced frictions between marketing concerns and the Government agencies that administer wartime control programs. It seems to be realized, nevertheless, that the private and the public agencies have a common interest in numerous marketing problems. In the irritations of the moment the agricultural businessman may long for absolute freedom of action; but when he considers what might happen if all Government controls were removed suddenly, he generally sees the need for discriminating action and also for continued cooperation in dealing with the marketing situation. He realizes that at best the situation will be difficult and at worst could be disastrous.

Plans for dealing with post-war marketing problems for agriculture must be based on facts and analyses. Otherwise, it will not be possible to avoid costly mistakes. For example, the producer of dehydrated foods for the armed forces, when he tackles his conversion problem, must have information about prospective consumer preferences for alternative types of processed products, about prospective technological improvements in different processing operations, about the prospective relative supplies of different products, about potential export outlets, and about the probable actions of other processors. Most private agricultural marketing agencies do not have large research staffs. Hence the necessary information must be provided by public agencies. Much information will be required also in connection with the revision of Government programs to meet postwar conditions.

The Wartime Controls

One problem in dealing with post-war conditions in agricultural marketing will concern the wartime regulations and controls. Some of these regulations, such as those designed to reduce the number of deliveries of milk and to stop the sale of bread on consignment to retailers, may be found to have such desirable results that we will want to continue them even in peacetime. Some private marketing agencies and associations have expressed concern over the possibility that the savings effected by wartime regulations in the distribution of milk

may be lost by a return to completely unregulated competition. It might then be more difficult for the fluid-milk industry to compete with lower priced substitute products.

Export Marketing Requirements

Knotty marketing problems will arise in connection with our exports. During the war our exports of farm products for use by the armed forces and our allies have greatly increased. On the other hand, our commercial exports have dwindled to very small proportions. How may we regain and, if possible, expand our commercial export outlets when the war is over? Upheavals in world political and economic conditions will complicate the problems, which will have a bearing on international finance, exchange rates, shipping, and purchasing power in various countries.



High hopes have been expressed that we shall have a vast resurgence of international trade after the war, encouraged by new types of international organization and by an awakening of the peoples of the world to the political pitfalls and economic disadvantages of narrow economic nationalism. Realizing these hopes, however, will call for hard work and mutual sacrifice, as well as a sharing of the benefits. Our cotton producers, for example, will have to consider under what price conditions they should try to promote expanded world takings of American cotton. High prices, in comparison with those of other nations, could practically stop the flow of cotton exports. On the other hand, will producers in other countries be willing to go along on a reasonable basis for dealing in world markets, or will they resort to cut-throat competition of the sort which disrupts world markets and leads to eventual maladjustment everywhere? Policies in international trade are the key to satisfactory or unsatisfactory dealing with many domestic problems.

Outlets for Wheat and Cotton

During the marketing year 1943-44 perhaps 470,000,000 bushels of wheat were fed to livestock in this country. In ordinary times price relationships would prevent the diversion of such large quantities to this use. Something will have to be done when the war is over to find an outlet for the excess of wheat above the domestic human requirements. In the recent past the excess has amounted on an average to about 150,000,000 bushels annually. It is obvious also, that wider outlets for cotton will have to be found if there is not to be a large excess above domestic consumption. New uses for cotton created by technological improvements will be offset more or less by the inroads of synthetic fibers such as rayon. Rehabilitation of liberated countries will help to absorb what otherwise might be large post-war surpluses. But foods and fibers for the liberated nations will furnish merely a partial and temporary offset to reduced Government war buying for the armed forces and lend-lease.

The war has greatly accelerated technological progress in relation to food processing and marketing. It has retarded the commercial development of some methods such as freezing, owing to the shortage of equipment and manpower, but the end of the war will presumably remove this handicap.

Many of the technological developments in food utilization which have been introduced during the war to meet special problems such as the shortage of shipping space and the lack of refrigeration facilities in areas of hostilities no doubt will be abandoned after the war. But so many new developments are in prospect that it is safe to predict that eventually a virtual revolution in the marketing of perishable agricultural commodities will take place. This will help to raise standards of living of the world's population, will further the international exchange of foodstuffs, and will open up new markets for producers of some agricultural commodities. It will bring problems, however, as well as benefits. Both producers and marketing agencies will face new types of competition. Specialization of production will be promoted, and many shifts in production probably will result from these marketing developments.

Important among these newer technological processes are dehydration, the preservation of food by freezing, and air transport. Although dehydrated foods have certain disadvantages in competition with fresh, frozen, and canned products as now sold in the more highly developed centers of consumption, they should as a result of improved air transport make available to what are now relatively inaccessible markets a larger variety of foods. Improvement in present processes of dehydration will result in better quality products. Dried milk promises to become an important competitor of fluid milk. It may greatly affect the geographical distribution of production and force long-overdue economies in the distribution of fluid milk.

The freezing of fruits and vegetables, meat, and possibly other perishable foods makes possible the furnishing of a seasonally stable supply of these foods. They have superior quality and nutritive content and offer many conveniences to the ultimate consumer. Such freezing will result in important changes in the processing and distribution of many foods, particularly fruits and vegetables, meats, poultry and eggs, cream, and possibly even milk. These shifts may give rise to entirely new types of retail dealers in foodstuffs handling frozen perishables. The operations of wholesale dealers, terminal produce markets, and chain-store organizations will be vitally affected. Canners may be forced to shift to new types of operation. New and different storage facilities will be necessary. Transportation will be largely affected. There will be a need for new types of refrigerator cars, trucks, and other transportation facilities. The relative advantages and disadvantages of production areas for fresh perishable products will be greatly altered by these changes in marketing. Changes in the seasonality of prices may reduce the advantages now held by producers in early market areas.

Marketing Techniques in Post-War Years

Studies already made show that air transport of some fruits and vegetables is practicable in competition with present modes of transport and distribution in a country like the United States and undoubtedly will play an important part in improving the diets of other populations to whom many types of healthful foods are now unavailable. The release of large quantities of air-transport equipment and personnel from war activities and the use of airport facilities which have been constructed throughout the world for the prosecution of the war will result in a development of air transport far in advance of that which would have occurred under normal conditions.

Experience in the handling of large quantities of both perishable and nonperishable foodstuffs in supplying the armed forces under extremely difficult climatic and other conditions will serve as a basis for improved storage and other techniques during peacetime.

Among new problems which will be presented and among existing problems which will become more urgent are the following: (1) Conversion of food-dehydration facilities to peacetime uses; (2) the use of air-transport equipment and personnel of the armed forces in transporting farm products; (3) the marketing of dried milk in relation to the established fluid-milk markets, and impacts on specialized dairy production areas; (4) post-war needs in retail food-distribution facilities, with special reference to types of supermarkets needed in view of the prospective large development of frozen foods; (5) the orderly development of the frozen-food industry to prevent gluts and other difficulties which may arise from too hasty conversion and lack of distribution facilities and home-storage equipment; (6) the development of pre-cooked frozen foods, with special reference to institutional uses; (7) post-war needs for assembly and processing facilities to meet new technological developments, such as extractor, cleaning, and conditioning equipment of cotton gins to care for mechanically harvested cotton, the installation of high-density compressors at gins and of long-draft spinning equipment in mills to facilitate the use of a wider range of staple lengths of cotton without adjusting the frames; (8) readjustments in oil processing facilities to care for post-war changes in the composition of the fats and oils supply; (9) the determination of the possibilities for broadening markets and reducing costs of marketing perishables with portable refrigerated shipping containers; (10) the determination of consumer preferences in relation to a wide variety of new products and other questions; (11) determination of manpower requirements in marketing in relation to the problem of unemployment; (12) the determination of suitable arrangements for marketing agricultural surpluses internationally, including possible facilities for the physical handling and sale of commodities moving outside of the ordinary commercial trade channels without directly affecting pricing in commercial transactions.

A second possible post-war development in the field of marketing which may become very significant is the introduction of consumer grades

and standards on a much larger scale. This does not mean the enforced elimination of private brands and competitive merchandising practices, but rather the gradual introduction of standard grades for foodstuffs at the consumer end of the marketing system along lines which have been gradually becoming more effective and important at the producing end. This could have very real beneficial effects on marketing costs and methods. Thus, even the dry-grocery fields, which will remain relatively unaffected by the new techniques of processing referred to above, may undergo important changes in the post-war years.



SOAP ORDER (WFO 42b) AMENDED

WFA has amended WFO 42b continuing the permitted use of fats and oils in the manufacture of household package and bar soap for civilian consumption in the second quarter at about the level of use during February and March, and reinstating provisions which limit the soap inventories of industrial users to a 45-day supply. The inventory limitation was effective March 22, 1945; the quota provisions, April 1, 1945.

The manufacturers' fats and oils quota for making household soap was reduced January 31, 1945, from 90 to 85 percent of the average quarterly use during 1940 and 1941. Effect was to reduce February and March production of this type of soap to approximately 80 percent of production during the same months of the (1940-41) base period. The amendment fixes the fats and oils quota for household soap at 80 percent--the same quota in effect for all soaps for several months before October 1943.

With one minor modification, provisions of WFO 42b, which limit soap inventories of industrial users to a 45-day supply, are on the same basis as those in effect under WFO 86 before its termination on August 24, 1944. Under WFO 86, the limitation was based on aggregate totals. The new provisions, however, permit inventory calculations by types of soap used for specific purposes. For example, if a user has less than a 45-day supply of any type of soap for a specific purpose, he may acquire that type up to the 45-day level for that purpose even though he has that type of soap in inventory for other specific purposes.

The inventory limitation was reinstated to provide a more even distribution of available soap supplies among industrial users.



CANDY SET-ASIDE REDUCED TO 35 PERCENT UNDER WFO 115

Effective April 1, the set-aside percentage of candy bars, candy rolls, or candy packages under WFO 115 is reduced from 50 to 35 percent.

Preparing and Packing the 1945 Wool Clip

.... By Alexander Johnston
and Durham Jones



Very soon now the 1945 wool harvest will get under way. Millions of pounds of wool will tumble from the shears, pour into bags on the sacking stands. Busy trampers will pack the clips for market. Handlers will pile bags at the warehouses, setting aside representative bags for the Government wool appraisers who will value the clips.

During the 2 years since the Commodity Credit Corporation offered to purchase the U. S. wool production, some pretty interesting and important marketing facts for the wool grower have come to light. To set them down in black and white is the purpose of this article. Like other agricultural products, wool should be so prepared for sale that it has a favorable psychological effect on the appraiser or buyer. Just as buyers think better of clean white eggs than of dirty eggs, they think better of a well-prepared wool clip than of a poorly prepared clip. And while poor-quality wool, no matter how well it is prepared, cannot compete with superior-quality wool, yet superior preparation will increase the value of any clip.

It has been the custom for wool growers to value their wool in terms of cents per pound. But there is an even more important selling factor--the total value per fleece. For example, Bill Jones gets 37 cents a pound net for his wool. His average fleece weighs 8 pounds, so he gets \$2.96 a fleece. Tom Smith gets a net of only 35 cents a pound for his wool, but he has an average fleece weight of 10 pounds, which brings him \$3.50 a fleece. With each man running a band of 2,000 head, Smith's wool check beats Jones' by \$1,080. This increased profit means a lot in these times when the margin of profit in the sheep business grows narrower each year. Growers should think in terms of price per fleece than per pound.

Good preparation is one way to get that added profit. Here are the important points of good wool preparation:

1. *Keep the Fleeces Clean.* Straw, dirt, and manure will stick to the wool and spoil its appearance if a sheep lies on a dirty floor in the sweat shed or shearing pen. Keep the floors of the individual

shearer's pens clean. The sweeping boy should scrape and sweep floors of the shearer's pens and the wool alley at least twice a day.

2. *Don't Use Too Much Branding Paint.* Branding paint on wool is simply a defect. It has to be hand-clipped or specially processed, and this costs money. Use branding fluids as sparingly as possible. Use small branding irons. If sheep must be daubed during culling or subdividing the band, use a small-surface dauber if possible. A tomato can is too large; a round pint bottle is better. Daub the sheep on top of the head because the wool there is worth less than that on the withers and back. Many growers do this even though they have some trouble at the dodge gate because the crowding sheep keep their heads down between the legs of the animals ahead of them. In bands where there are not enough black sheep to serve as "markers," it is the custom to slobber branding paint along the back and sides of a white-wooled ewe or wether in order to make a marker of the animal. It would be much better to use as markers the "bells" or sheep having black-spotted faces than to foul a white fleece with excessive branding paint.

3. *Don't Pack Untied or Carelessly Tied Fleecees.* The Schedule of Values for Domestic Shorn Wool, 1945 Wool Purchase Program, issued by the Commodity Credit Corporation, states: "Except in the case of Texas 8 months' and Texas fall wool, all untied clips shall be discounted 2 cents per pound from the grease appraisal price." Tie each fleece securely, with the flesh end of the staple showing and the shoulder and side wools on the outside. Don't have any long streamers of wool hanging from the tied fleece; tuck them in under the string (they are seldom found when the fleece is correctly tied in the first place). A loosely tied, straggly fleece gives the appraiser a bad impression and increases the time it takes to grade and sort at the warehouse and mill. Use only paper fleece strings to tie wool. The CCC Schedule of Values says: "The discount shall be 10 cents per pound, clean basis, for a lot tied with sisal or binder twine." And baling wire ranks even lower than sisal or binder twine; don't use it to tie fleeces.

4. *Take All Tags, Dung Locks, and Stained Pieces Out of the Fleece.* On 1945 clips Government wool appraisers are instructed to deduct up to 3 percent of the grease appraisal price on clips which do not have all tags and other off wools packed separately. Tags and stained pieces, especially if very moist, stain white wool badly and make it unsuitable for making first-class goods in natural white or dyed light colors. Even if the tags and stained pieces are dry enough not to stain, their presence detracts from the fleece appearance and increases the cost of sorting at the mill. Remove them from the fleece before tying it, and pile them in a shearing-shed corner along with the floor sweepings. Pack them in a separate bag at the end of shearing. Never put a layer of tags in a bag along with fleeces. These tag rings, as they are called, will seriously prejudice them with the appraiser. Faulty tying often causes detachment from the fleeces of choice pieces of white wool. Before they get dirty, they should be picked up and put into bags with the fleeces.

5. *Don't Pack Black Wool With White.* If black, gray, or piebald fleeces are allowed to touch white wool, the black fibers will stick to the white fleece. Black fibers in a piece of white or light-colored cloth are a serious defect because they have to be plucked out with tweezers by hand. Put all the black sheep in a separate shearer's pen and let one shearer shear them out. When this is not practicable, and the black sheep go into the individual shearing pens along with the white ewes, take care that after a black sheep is shorn, the fleece and every loose fiber is swept up and carried to the black pile.



The packing of black, gray, or piebald fleeces in with white fleeces seriously penalizes the whole clip. The CCC Schedule of Values for Domestic Shorn Wool reads: "Black Wool (Grease). 1. *Original Bag.* The discount shall be one-third off the grease appraisal price of the white wool.... 2. *Graded.* The discount shall be one-third off the grease appraisal price of the comparable grade of white wool.... Note: If the fine and half blood, or the three-eighths and quarter blood are thrown together, the discount shall one-third of the average grease appraisal price of the comparable grades of white wool...."

6. *Don't Pack Burry Fleeces With Burr-Free Fleeces.* The CCC Schedule of Values reads: "Regardless of the State of origin, wools containing clover burrs, foxtail, and other vegetable defects, to a degree serious enough to affect their commercial value, but not requiring carbonizing, shall be discounted a minimum of 1 cent per pound and a maximum of 10 cents per pound, clean basis. Note: Wools containing an occasional or very scattered hard burr, or a trace of hay or chaff, are not subject to discount."

7. *Don't Pack Ewe, Yearling, and Ram Fleeces Together.* Yearling wool is generally lighter-shrinking than ewe wool of the same breeding, whereas ram fleeces are very often heavier in shrinkage because they contain more grease. Yearling wool is distinctively soft and is usually longer than ewe wool. Ram wool has a thicker fiber than ewe wool. The CCC Schedule says: "1. Crossbred bucks, no discount. 2. The discount on fine bucks shall be 5 cents per pound, clean basis, off the comparable ewe wool classification." So pack ewe, yearling, and ram fleeces separately.

8. *Ask Separate Appraisals on Ewe, Yearling, and Ram Wools.*

9. *Don't Pack Dead Wool, Crutchings, and Eye Clippings With Shorn Fleeces.* Wool pulled from the decomposed carcasses of sheep that have died on the range or in the pasture (it is usually called Murrain wool) is inferior because it usually looks unhealthy and harsh and smells foul. Dead wool is wool pulled or sheared from dead sheep or pelts; it has no foul odor. Crutchings (wool clipped from around the breech and udder before lambing) are usually coarse, stained, and heavy-shrinking. Eye-clippings (eyebrows) are short pieces clipped from finer-wooled

sheep in winter; they are inferior because they are short. Always pack these off wools in a separate bag.

10. *Mark Every Bag To Show the Contents.* This is one case where branding paint should not be spared. Each packed bag should be stenciled with the class of wool it contains in letters at least 6 inches high.

11. *Never Pack Wet Wool.* Lay any wet fleeces out on a clean, dry floor and let the wind dry them. Mold that develops in wet wool causes heat and weakens and stains the fibers. The CCC Schedule calls for a minimum of 2 cents a pound for slightly stained wool and up to 10 cents for heavily stained wool. Buyers discount the value of wool that smells moldy.

It costs little more to prepare and pack wool correctly. What costs growers money is the handicap of poor preparation and packing. According to the Schedule, up to 3 percent of the grease appraisal price of wool appraised in the original bags will be deducted unless all tags and other off wools are packed separately. One burry fleece, one ring of tags, or a few straggling, poorly tied fleeces in a bag and the appraiser or mill buyer can get a bad impression of the whole clip. And when the grower tots up his figures at the end of the year, the way he has prepared and packed his wool may well mean the difference between profit and loss.



POTATO GROWERS GIVE STATE A FARM

Commercial potato farmers of Connecticut have decided to subsidize government--instead of waiting for government to subsidize them. These potato men have launched a campaign to collect \$10,000 to buy a potato farm and the necessary equipment as a gift to the State. The principal advocates are voluntarily taxing themselves a dollar an acre.

The Connecticut Agricultural Experiment Station (Board of Directors) has agreed to accept the gift and use the farm for various scientific potato research projects now being carried on at New Haven, Storrs, and Windsor, and for other research programs.

Leading farmers who advocate the plan foresee an opportunity for the State's 21,000-acre potato-growing industry to develop and expand on a sounder basis with the aid of a more intensive and better coordinated scientific research program. They expect to learn by this method how best to combat potato insects and diseases under Connecticut conditions; which crop rotations, fertilizers, and tillage methods best suit local soil and climate. It is also possible that various types of potato-growing machinery may be tested and compared on this farm.

OPERATIONS UNDER MILK CONSERVATION ORDER SUMMARIZED

Reports to WFA from the 138 areas now subject to the milk conservation order (WFO 79) reveal that during the last 6 months of 1944 compliance by milk dealers kept national sales of milk and byproducts below quota during the entire period. The quota on cream was exceeded only in August and then by 5 percent.



There were, of course, cases of individual violation even on milk and byproducts during the July-December period. Below-quota sales by other milk dealers, however, generally kept the areas under the conservation order from using more than their established share of milk for fluid uses. WFO 79 was issued in September 1943 to help assure necessary supplies of milk for manufactured dairy products and to forestall coupon rationing of fluid milk. It is part of WFA's over-all program to encourage the necessary production of cheese, evaporated milk, and other dairy products vitally needed in the war effort.

Reports from 11 of the metropolitan markets which also operate under Federal milk marketing orders show that fluid milk and cream sales during the last half of 1944 were higher than during the corresponding period of 1943, but that the increase in the amount of milk used for manufacturing purposes was even greater. Of a total increase of 176,635,000 pounds of milk available to the 11 markets--Ft. Wayne, New York, Chicago, Louisville, Cincinnati, New Orleans, Omaha-Council Bluffs, Quad Cities (Rock Island, Moline, and East Moline, Ill., and Davenport, Iowa), Sioux City, Toledo, and Kansas City--120,756,000 pounds went into manufactured dairy products. WFA officials said that the increased milk available for manufacturing purposes resulted from the over-all expansion in milk production, and was diverted into manufacture by such conservation measures as those contained in WFO 79.



QUOTA FOR PROTECTIVE COATINGS, COATED FABRICS, AND FLOOR COVERINGS

Because linseed oil continues in short supply and military requirements remain heavy, WFA has amended WFO 42a to reduce from 50 to 40 percent (of average use in 1940 and 1941) the quantity of fats and oils available, beginning April 1, 1945, for the manufacture of protective coatings, coated fabrics, and floor coverings for U. S. civilians. If the consumption of linseed oil--the oil principally used in these products--were to continue at the present level, supplies would be reduced below minimum requirements for working stocks before the fall harvest of a new flaxseed crop. The 1944 production of flaxseed, from which current supplies of linseed oil were crushed, was about 55 percent below 1943 production.

DEVELOPMENT OF QUICK TEST FOR FLOUR ENRICHMENT

A new chemical test which will indicate almost instantly whether flour is enriched, partially enriched, or unenriched has been developed by WFA in its laboratory at the Beltsville (Md.) Research Center. The new test will be used in connection with flour inspection by WFA's Office of Marketing Services.

The test requires the use of only two reagents--a 4 percent aniline solution in ethyl alcohol and a 4 percent aqueous cyanogen bromide solution. The actual test is simple. About one-half to one gram of flour is pressed on a white blotter or in the well of a porcelain indicator block. Two drops of the aniline solution are then dropped on the center of the flattened flour; then three drops of cyanogen bromide solution. Almost immediately a canary yellow color appears if the flour has been enriched, the depth of color depending on the amount of niacin--one of the flour enrichment ingredients present in the flour. A comparison with flour containing known amounts of niacin, treated the same way, will indicate the niacin content of the flour tested.

As flour is ordinarily enriched by the addition of a concentrate containing the various enrichment ingredients in the proper proportions, a test of such flour for any one of these ingredients--niacin, in this case--will indicate whether the flour is fully enriched. The color comparison should be made within four minutes after application of the reagents because even unenriched flour will develop a slight yellow color after 10 to 15 minutes.

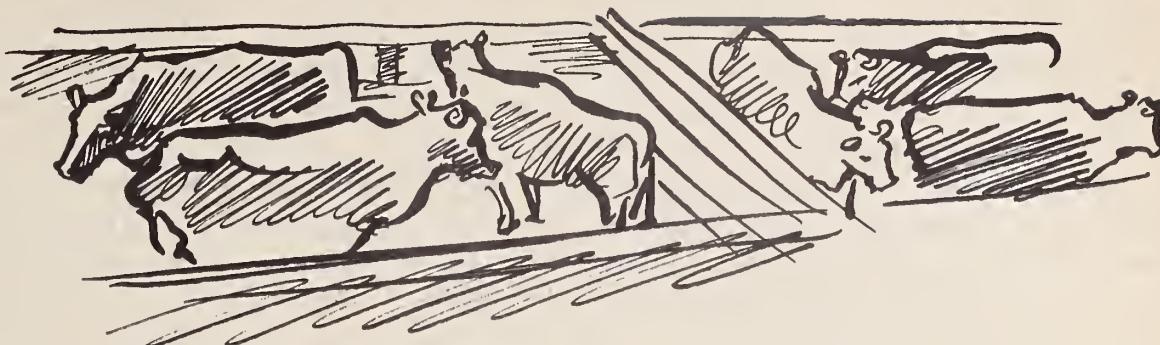


MILLED RICE SET-ASIDE INCREASED

WFA has amended WFO 10 to increase in both the Southern States and California the set-aside of milled rice from 60 to 100 percent.

The increased set-aside was necessary principally because of increased Government rice requirements in liberated areas of the South Pacific. At the current rate of consumption, however, rice for civilians was expected to meet normal demands through the crop year ending July 1945. Up to March 10, effective date of the action, civilians had received approximately 7½ million bags of rice since July 1, 1944, and current civilian allocations provided for approximately 1 million additional bags before July 1, 1945, making a total of 8½ million bags for the 12-month period. This compares with about 8¼ million bags for the preceding 12-month period. Arrangements had been made by the Commodity Credit Corporation to assure civilians their present allocated quantity of approximately 1 million bags. Arrangements have been made for foreign and other agencies also.

Federal Meat Inspection



. By Stephen O'Dea

Only meat intended for American consumers that goes into interstate commerce may be inspected by the Federal Government. Today--counting the meat for the armed forces and lend-lease (all of it so inspected) the meat that moves in interstate commerce amounts to about three-quarters of the Nation's supply.

Of the 118,000,000 food animals--cattle, sheep, swine, etc.--slaughtered under Federal inspection during the 1944 fiscal year, 443,563 were condemned as unfit for human consumption. The rest of them left American meat plants wearing the round purple stamp which reads: "U. S. Inspected and Passed." (That coloring, by the way, is perfectly harmless to eat.)

Before Slaughter

In the inspection of most foods and agricultural products, the inspector is interested in the product as it appears before him--not in its history. When sugar is being inspected, the inspector does not go back to see if the sugar as it came from the cane was in good condition. But in Federal meat inspection, the inspector does not look merely at the carcass, or the parts of the carcass ready for shipment. His work begins when, accompanied by an assistant from the plant, he enters the pens early in the morning--often before daybreak--and inspects every live animal that is to be slaughtered that day.

This part of the Federal inspection--"ante mortem" inspection it is called--is no mere routine of going through motions. During ante mortem inspection in the 1944 fiscal year, 276,458 animals were suspected of disease or conditions that warranted special examination, and 55,789 of these suspects were condemned outright as unfit for human consumption.

During the ante mortem inspection the animals are (1) condemned and their carcasses are so treated that they can never be used for food;

(2) "suspected" and sent in for special examination; or (3) passed and sent in for slaughter as food animals.

After slaughter, the "post mortem" examination begins on all the carcasses and parts of animals that have passed inspection to that point. During fiscal 1944, of 118,044,059 animals that had passed the ante mortem inspection, 387,774 were condemned as unfit for human consumption. Among the causes were abscess, arthritis and bone diseases, emaciation, cholera, injuries, peritonitis, pneumonia, toxemia, degenerative diseases, influenza, parasitic diseases, pleurisy, skin diseases, and tuberculosis. Many of the diseases were impossible to detect while the animal was still alive. During the same period, 1,526,483 parts of carcasses were condemned for various diseases and conditions, and 53,011 calf livers and 1,339,292 cattle livers.

Federal inspection extends also to the preparation of the meat and meat food products. In fiscal 1944, 13,668,866 pounds out of 16,707,-585,972 pounds prepared and processed under inspection were condemned for food purposes and destroyed. (The latter figure represents "inspection pounds" and possibly includes meat and products which were inspected and recorded more than once at different stages of processing, e. g. curing followed by canning.) Reasons for condemnation included souring of the meat, taint, rancidity, and uncleanliness. The meat and meat food products include beef and pork--cured, smoked, or dried; sausage--fresh, smoked, and/or cooked, and to be dried or semi-dried; cooked beef and pork; and canned meat and meat food products such as beef, pork, sausage, and soup.

The Meat Inspection Act

Federal meat inspection was first authorized by Congress in the Federal Meat Inspection Act of 1890. The law was enacted because foreign countries insisted that the meat they imported from the United States be inspected and guaranteed to be wholesome. Passed under the Federal Government's power of regulating interstate commerce, the act applied only to meat-packing establishments engaged in interstate commerce. The early acts of 1890 and 1891 proved inadequate to protect U. S. meat consumers, however, and the act which exists today was passed in 1906.

The present act directs the issuance of regulations that control (1) the inspections, (2) the handling and preparation of meat and meat food products to assure wholesomeness, (3) the labeling and composition of these products, and (4) the maintenance of sanitary conditions. Moreover--and this is very important--it gives the inspectors full authority to act at once and on their own judgment and initiative to see that the law is carried out. Under this latter power, an inspector can condemn and render diseased animals unfit for human consumption forthwith, without having to resort to such time-consuming procedures as quarantine and seizure. The act does not authorize condemnations outside inspected establishments, however.

How does a packing plant begin to operate under Federal inspection? It's application should be accompanied by drawings of the entire building, floor by floor, with a detailed showing of the use and location of essential equipment; the entire plant site, adjoining buildings, alleys, roadways, railroads, streams; and the location of walls, partitions, doorways, windows, lavatories, and other features. Every factor which might affect plant cleanliness and efficiency must be examined. The water supply, manner of sewage disposal, the physical relation within the plant of departments handling edible and inedible products must be inquired into. Floors, walls, and ceilings must be so constructed that they can readily be kept clean. Other factors include drainage, ventilation, equipment, slaughtering facilities, and employee accommodations.

When the applicant believes his plant will meet the tests, he asks for a survey by an inspector. If the plant is approved, inspection service begins--which brings us back for a more detailed look at ante mortem and post mortem inspection.



The holding pens, where the animals are kept ready for slaughter for a particular day, are so arranged and lighted that each animal can be observed both at rest and on foot.

Animals that have been set apart for further examination before slaughter are of two kinds. The first kind are those affected with a condition that would cause their condemnation on post mortem examination, and those affected with such conditions as rabies, tetanus, and the like, which are identified as "U. S. Condemned" and go no farther toward slaughter for human food (they are killed and usually treated for use as fertilizer). The second kind are those animals that show no conclusive evidence of disease but do have symptoms that justify the suspicion of some abnormality. These animals are identified as "U. S. Suspects," are slaughtered as food animals (but separate and apart from the normal animals), and receive a special post mortem examination.

In the post mortem inspection and before slaughtering begins, the entire slaughtering department, the employees' clothing, and the equipment to be used in the dressing operations are inspected for cleanliness. After slaughter, there is a thorough examination of the carcass. The head is carefully examined, the lymph glands are incised and inspected, the tongue and all exposed surfaces are observed. Jaw muscles, internal and external, are split in a search for cysts, and the tongue is examined further. While the head is being examined, the carcass goes to the dressing bed where it is skinned and eviscerated. All internal organs are inspected, the process including repeated incisions of important lymph glands and opening of the bile ducts. The carcass is then split, and receives the "rail inspection." Here each half of the carcass is inspected and manipulated, all surfaces are observed, the lymph glands and kidneys are explored by hand.

The inspector immediately identifies all parts of every abnormal carcass with sections of a "gang tag." Each section of the tag bears the same serial number and the term, "U. S. Retained." Then these tagged parts of the carcass are assembled for the "final inspection," in which the steps already taken are completely reviewed and, depending on the condition found, additional inspections are made. When the effects of an abnormal condition are limited to a part, that part only is condemned and the rest of the carcass is passed for food.

The inner organs are closely inspected after separation of the viscera into several parts. Edible organs are removed and prepared for food. The fat is separated from the intestines, which are flushed and cleaned thoroughly for use as sausage casings.

Curing, smoking, and canning also are closely inspected. The authority given by law to the Meat Inspection Service over the labeling of meat and meat food products at inspected establishments is probably as complete as could be given to any agency charged with the administration of laws and regulations. Correct labeling is assured by the authority to prohibit false and misleading labeling plus the requirement that a label be approved by the Meat Inspection Service before an establishment may use it. The Federal inspector also sees to it that the label used is approved and applies to the particular product, and that only those ingredients that appear on the label are used in preparing the particular meat food product.

With the war has come a record slaughter, much of the meat going to U. S. armed forces. Although the number of animals slaughtered and the volume of meat and meat food products inspected during fiscal 1943 reached what was at that time the highest level in the history of the Service, in 1944 these activities increased by 24 and 18 percent respectively. Inspections were conducted at 944 establishments located in 363 cities and towns. During fiscal 1944 the volume of meat and meat food products examined for condition and conformance to specifications for other Government agencies also reached a record high.

This increase in slaughtering has caused tremendous expansion of plants built or remodeled for Federal inspection. It may be reasonably expected that many of these plants will be equipped to remain under inspection after the war. That would be in the public interest.



With approval by 93 percent of the Georgia peach growers voting in a recent referendum, WFA will continue in effect the Federal marketing agreement and order regulating the handling of fresh Georgia-grown peaches. Under provisions of the agreement which require a biennial referendum, Georgia growers balloted during an 11-day period in January. The 93 percent of growers favoring continuance of the program represented 96 percent of the tonnage voted.

WFA POULTRY RELEASE PLAN IN BROILER-PRODUCING STATES

WFA has authorized deputy administrators of the chicken set-aside order (WFO 119), operating in designated areas of eight broiler-producing States, to release limited quantities of dressed poultry to authorized processors for distribution in civilian trade channels.

Under the authorization, a weekly processing goal will be established for each processor. Those who exceed their goal may retain half of the excess quantity--less the poundage of set-aside poultry rejected by the U. S. Army Quartermaster Corps--for distribution to civilian outlets. Goals will be based on the estimated processing capacity of each plant of an authorized processor in a 40-hour week.

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WFA CUTS PORK SET-ASIDE

The over-all quantity of pork made available for Government purchase will be slightly decreased as a result of adjustments made in pork set-aside percentages by WFA through amendment 11 to WFO 75.3, effective April 1.

The amendment reduces the set-aside of frozen pork sides to zero from the previous $4\frac{1}{2}$ pounds for each 100 pounds of live hog slaughtered. It also reduces the set-aside of fat cuts to $1\frac{1}{2}$ pounds from the previous $2\frac{1}{2}$ pounds.

Set-aside percentages increased under the amendment are: Loins, up to $5\frac{1}{2}$ pounds from $4\frac{1}{2}$; hams up to 6 from 5 (with the percentage required to be prepared as overseas hams increased from 30 to 40); bellies up to $5\frac{1}{2}$ from 5; and shoulders (including trimmings) up to 10 from 9. The lard set-aside, recently reduced to $5\frac{1}{2}$ pounds, remains at this level. Net effect of the adjustment is to reduce the over-all set-aside of pork for the armed forces, war services, lend-lease, and other claimants to about $28\frac{1}{2}$ pounds out of each 100 pounds of live hog. The set-aside had been about $30\frac{1}{2}$ pounds of the total quantity produced in packing plants operating under Federal inspection.



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WFO 18.3 (TEA) PARTIAL SUSPENSION CONTINUES

Partial suspension of provisions of WFO 18.3 (tea) has been extended to cover the second quarter through June 30, 1945. This suspension, which was in effect during the first quarter, removes all limitations of the order except the reporting and record-keeping requirements. Packers are therefore required to continue to file quarterly reports of stocks and deliveries of tea on Form FDO 18-1 as in the past.



What Color Is Cotton?

. . . . By Grace E. M. Waite

What color is cotton? What color is hay . . . an apple? What difference does it make, anyhow, in the marketing of agricultural commodities?

Well, in cotton for example it might make the difference between Middling 1-1/16-inch cotton and the next grade below. Today that would be around \$8 a bale. And that--a difference of about 7 percent on the sales price--is not, as the saying goes, hay.

Color is a factor in grading agricultural commodities because it is tied in with their price, quality, nutritive value, and salability. In cotton, color has much to do with grade. Cotton left long in the field becomes stained, and particles of leaf and trash are blown into the cotton bolls. Removal of the stain with bleaches is expensive; the small leaf particles cut the cotton and spoil its quality. There are a number of cotton grades. The cost of processing them varies considerably, affecting the price. And textiles made from low grades of cotton cannot match the appearance and color of textiles made from the better grades.

In hay, the greener the product the greater its nutritive value in animal feed. Experiments by the Bureau of Dairy Industry showed that dairy cows fed on high-grade green hay (No. 1 Timothy) remained in good health and produced normally, but that when fed for 6 months or more on a ration of low-grade hay (No. 3 Timothy) the cows usually dropped immature, weak, or dead calves. When milk from cows that received the low-grade ration was fed to calves normal at birth, the calves died within 3 months. Hay discoloration is due to maturity, sun bleach, dew, rain, or other damage.

Color differences are also a very important indication of the relative success of different methods of freezing and dehydrating food.

Standards have been set up for use in grading most agricultural products, to insure fair and satisfactory marketing. Grades formulated in the United States Department of Agriculture often include color, and when standards for these grades are developed color is a factor. Grading service is maintained for cotton, hay, butter, cheese, eggs, fruits and vegetables (fresh, canned, frozen, and dried), honey, tobacco, cereal grains, meats, and rosin. Color--and that means the color by daylight--is important in classifying each of these commodities. Since the color gradations are usually very fine, some exact system must be used to decide the grade.

Color Terminology

That is where color terminology comes in. Certain color terms are in common commercial use. The trade describes cotton as being creamy, bloomy, bright, gray, dull, spotted, tinged, and stained. Official standards include color differences within and between grades of White, Extra White, Gray, Spotted, Tinged, and Yellow Stained.

Other commodities also have distinctive color terminologies. So it's a good idea to relate color standards to the terms of the individual trade. The lean of beef may be described as bright cherry red or bright pink, moderately dark cherry red, and so on, in perhaps 10 degrees of red or pink. Beef fat may be white, creamy, or yellow in about 7 degrees. The laboratory worker who measures color and the practical grader must understand each other's language.

Color Charts Used for Grading

Some inspectors and graders base their color judgments on standards they carry in their heads--mental images. In a few cases color charts may be used if a standard has been established that matches a color chip on the chart. The Ridgeway charts developed in 1886 and enlarged in 1912 contain 1,113 colors, 36 hues reduced by regular proportions of white, gray, and black to give systematic groupings. The Maerz and Paul Dictionary of Color published in 1930 contains 7,056 colors on 56 charts; it is used in the Department of Agriculture in identifying color standards for canned fruits and vegetables because it contains the widest number of colors now available.

The Munsell color charts include a standard series of 20 or 40 hues graded through many steps of lightness and chroma (intensity). These charts are devised on a three-dimensional system of color description--hue, value, and chroma. Other available charts have no particular application to agricultural grading.

The use of color chips on a chart is usually not enough to specify the color in grading, however. A more exact system is necessary. In most cases color measurement is needed only for specifying the standard against which samples are compared, but it may also be used on individual samples, particularly in border-line cases.

Through use of the Munsell method of color notation, developed in this country in the early part of this century, measurements may be made directly by comparison to Munsell charts, or the method may be used indirectly by converting I. C. I. (International Commission on Illumination) notations into Munsell notations. In the Munsell notation, color is expressed in units of visual difference of the three psychological attributes--hue, lightness, and saturation (known in the Munsell system as hue, value, and chroma). The hue circuit is divided into 10 major hues: Red, yellow red, yellow, green yellow, green, blue green, blue, purple blue, purple, and red purple.

Disk Colorimetry

An early method of measuring color, developed in U. S. Department of Agriculture laboratories, made use of the Munsell system of notation and disk colorimetry. In disk colorimetry, disks cut with a radial slit (so that several may be slipped together, with portions of each visible, for use in spinning colors together) are spun by motor so rapidly that there is no flicker. Thus any color lying in the color solid within the areas bounded by the colors of the disks used may be matched.

In 1929, when the method was first published, Munsell disks were spun together and the resultant color was expressed in approximate Munsell terms by calculations involving percentages of the disks used and the Munsell notation for the hue, value, and chroma of each disk. In matching a cotton sample, the disks used may be yellow red, a yellow, a white, and a light gray. Most of the cotton colors are yellow red in hue, light in value, and weak in chroma, the color range being quite small.

The simplest instrumental set-up for disk colorimetry is a motor adjusted to disks on a central spindle, used with color disks that may be spun alongside the sample. The areas of the disks are adjusted until the color of the spinning disks matches that of the sample. Use of a neutral gray mask with openings of equal size--one placed over the sample, the other over the disks--provides standardization of background and size of comparison fields. The two fields are compared by eye, and the areas of disk segments are changed until the colors of the spinning disks and the sample match.

Colors of other agricultural products range from the purplish red of beets through reds for tomatoes and the yellow reds, yellows, and green yellows of many other vegetables. Greens, blues, and purples are seldom needed in agricultural color work; most of the greens, even of grass, are nearer to green yellow than to the green of the Munsell system.



Preparation of samples to be matched is important no matter what method of colorimetry is used. The problem is simple when a flat,

matte, opaque surface is to be measured, but most samples require preparation.

With raw cotton, surfaces of samples are generally prepared to resemble as nearly as possible the surface used in the standards against which they are compared. With canned fruits, large areas cannot be attempted because parts of the fruits may appear glossy on account of their rounded surfaces. Sometimes a thin glass plate is used to press the surface of the fruit to a level with the liquid in order that a larger surface may be measured. Special treatment is required to measure the color of liquids.

Newer Instruments for Measuring Color

Instruments with moving optical parts--by which the necessity for spinning the disks is avoided--are available. Sample and disk illumination is provided by these instruments. The disk colorimeters were first made for use by the Department of Agriculture in matching samples ranging from 1 to 14 inches in diameter (for a large slug of hay). Recently, more compact and useful instruments have been developed.

Standardization of the various conditions of illumination and observation is a necessity. Differences in the angle of illumination used cause larger differences in the comparison of glossy samples than of matte samples. Changes in surrounding colors of background may cause differences in results, and differences between black and white uniforms worn by laboratory operators will cause significant differences if the light they reflect is not kept from the disk or sample surfaces. Size of the areas compared will affect judgment of a color match. Some tolerance in matching is allowed, but the goal is to cut this to the smallest size.

Artificial Daylight Illumination

The illumination may be natural or artificial daylight. If natural daylight is used, light from a north window is preferable. When glossy samples are to be measured, the hanging of a canopy of black cloth above or behind the sample, so that black is imaged in the cover glass of the sample container, will eliminate the errors which would result from admixture of light reflected from lighter surrounding surfaces. Sometimes masks are used, with openings that allow placing the standard color sample next to the sample to be measured.

Good lighting is very important for cotton classification, and the cotton industry goes to great lengths to provide good natural daylighting in classification rooms. Use of carefully specified artificial daylight illumination in which the quality, amount, and direction of light are standardized makes classification possible on all days under the same lighting conditions. The color laboratory has made a number of technical daylighting studies that make this illumination possible.

Flourescent light, incidentally, has not been found suitable for color-grading work.

Inspectors or grades of products to be examined for color should of course have normal color vision. Most often the color-blind person is unable to recognize green and red; there is seldom any difficulty with blues and yellows. A hereditary defect, color-blindness shows up more often in men than women; it is estimated that about 1 male in 10 is more or less color deficient. There are various tests to discover such deficiencies. Apart from color deficiencies, some people are more apt at color work than others. A committee of the Inter-Society Color Council has recently developed a test designed to measure this aptitude for color-matching work.



CANNED FISH SET-ASIDES INCREASED

Canners of salmon, pilchards, Atlantic Sea herring, Atlantic mackerel, and Pacific mackerel will deliver to the Government 80 percent of their pack during the period from April 1, 1945, through March 31, 1946. The new percentages are contained in amendment 8 to War Food Order 44, which restricts domestic deliveries of canned fish. The WFA action is based on increased Government, military, and war needs for canned fish during the 1945-46 pack year.



FIVE-DAY-WEEK OPERATION OF PRODUCE MARKETS CONDEMNED

Operation of produce markets on a 5-day- instead of a 6-day-week basis was condemned on March 10 by Col. J. Monroe Johnson, of the Office of Defense Transportation, as wasteful of the country's critically limited supply of refrigerator cars.

The recent signing of a new union contract specifying 5-day-week operations the year round in the New York Wholesale Produce Market was "very disappointing," Colonel Johnson wrote Mayor Fiorello H. LaGuardia, of New York. He said the action would make it necessary for the ODT to reduce the number of cars going to New York.

Similar action contemplated in the case of the Chicago Produce Market, Colonel Johnson said in a letter to the Chicago Market Association, "will necessarily result in delay in the unloading of refrigerator cars, as they are furnished on a 6-day unloading basis weekly," and the refrigerator car supply was not sufficient, he said, to permit such delays. If a produce market is going to operate on a 5-day week, he said, "it will be permitted to have only five-sixths as many cars as it would receive if working on a 6-day week.

RESTRICTIONS REMOVED ON POTATO SHIPMENTS FROM COLORADO

Effective March 21, WFA has removed all restrictions of War Food Orders 120 and 120.3 on the shipment of Irish potatoes from Colorado.

WFO 120, which requires shippers to obtain WFA permits before moving potatoes outside designated areas, was issued originally in December 1944 to assure availability of good-quality stock for the armed forces. It was extended to Colorado early in February 1945. Restrictions were being removed in that State in late March because only small quantities were available in its widely scattered producing areas and sufficient supplies were being obtained in other areas.



LARD SET-ASIDE REDUCED

Under amendment 10 to WFO 75.3, effective March 26, 1945, packers operating under Federal inspection will set aside only $5\frac{1}{2}$ pounds instead of the previously required $7\frac{1}{2}$ pounds from each 100 pounds of the live weight of each week's slaughter of hogs. Butcher hogs produce about 13 pounds of lard for each 100 pounds of hog (live weight). The action was taken as a means of meeting essential lard needs. Packers operating in the following States need not set lard aside for Government procurement: California, Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, Washington, and West Virginia.



BUTTER SET-ASIDE INCREASED FOR APRIL, MAY

WFA has fixed the butter set-aside quota for April at 40 percent and for May at 55 percent of production. During February and March the set-aside percentages were 20 and 25 percent respectively.



War requirements for butter this year will be much higher than last year, largely for shipment overseas to the armed forces, officials have indicated. Increased supplies were urgently needed for immediate shipment.

Efforts are being made to maintain butter production and to keep the available civilian supplies flowing into trade channels on a fairly even monthly basis. During April and May, quantities of creamery butter for civilians will amount to about 80 million pounds as compared with an average of about 82 million pounds during February and March.



Fresh Fruit and Vegetable Opportunities

.... By Paul M. Williams

¶ In 1944 the United States produced 7,859,400 tons of 25 commercial truck crops for the fresh market, compared with 6,380,000 tons during the 10 years 1933-42. For 1944 the total canned vegetable pack--excluding baby food, baked beans, and soups--is estimated at 192,000,000 cases, compared with an average of 118,000,000 cases for the years 1937-40. In other words, during the war years the production of fresh vegetables has increased 23 percent, of canned vegetables nearly 63 percent.

¶ The frozen fruit and vegetable industry produced an annual average of 237,200,000 pounds during 1937-40, less than half the 525,400,000 pounds estimated for 1944.

¶ Nearly 18½ million Victory Gardens were grown in 1944.

¶ Housewives have canned huge quantities of fruits and vegetables which are still in basements and on pantry shelves. Not a few housewives have the equipment to freeze and hold frozen fruits and vegetables in frozen locker space.

¶ The dehydration industry, which produced less than 5 million pounds in 1940-41, in 1944-45 will produce an estimated 225 million pounds.

Production from the greatly increased acreage has been mostly profitable to growers, who are likely to be hesitant about reducing their acreage. Moreover, important new areas for producing off-season vegetables may be developed rather shortly and increase present production considerably.

The ability of our population to consume such a huge production will depend largely upon post-war buying power. Nobody knows what kind of post-war economy will exist in this country but, regardless of the conditions to come, the distributor who trims his sails now will be far better equipped to weather any post-war economic storms to come than his improvident competitor. And there are several things he might do now.

It is said that there is a 25 percent shrinkage in the bulk of fresh fruits and vegetables from the time they leave the shipping point until they reach the housewife's kitchen. This is a stinging indictment of the improper practices prevailing today in the fresh fruit and vegetable distributive industry. A large part of this shrinkage occurs after the goods leave the common carrier. Sacks of potatoes are handled like so much coal. Vegetables are subjected to high temperatures in summer and low temperatures in winter. Men should be taught how to handle perishables.

One of the most profitable things the fresh fruit and vegetable industry could do is to teach retailers how to handle and display produce better. The industry works hard to buy high-grade merchandise and has it federally inspected at shipping points, but these efforts avail them little when retailers do not handle it properly. By rough treatment laborers can lower a carload of U. S. No. 1 potatoes one whole grade. An official study of damage to potatoes shipped from Maine to retail stores in Boston showed that 95 percent of the 100-pound bags had received an average of more than 2 percent of damage from improper handling, and 5 percent of the bags had received more than 6 percent of damage.

Better Grading and Packaging Needed

Today, when there is a ready market for practically everything, quality considerations are frequently waved aside. But if in the future we are profitably to market fresh fruits and vegetables, better grading and packaging would seem to be essential. It may not be profitable to incur packing and shipping costs on the lower grades of our post-war produce; it may be better to leave the lower grades behind in the field and perhaps find processing outlets for them.

In some sections of the country, marketing agreements for certain commodities may serve the industry well. Limitation of shipment by grades and sizes, for example, may prove most advantageous to shippers and receivers in stabilizing markets.

Many people in the fresh fruit and vegetable business are concerned because of the inroads competition is making into their volume of business--and they rightly should be. To compete, the fresh fruit and vegetable industry should study four things:

1. *Better and more attractive methods of packing.*

2. *Buying on U. S. Grades.* Incidentally, at present the administration is considering the advisability of developing what might be termed "consumer grades" for fresh fruits and vegetables. Today there exists a system of U. S. grades which are used in wholesale transactions and as the basis for settlement of claims under the Perishable Agricultural Commodities Act. But an entirely new series of U. S. consumer grades for fresh fruits and vegetables may be found desirable for those who wish to sell on the basis of consumer grades. Such U. S. grades

would not supersede the present grades, but would perhaps assist those who wish to merchandise the highest qualities of various products in such terms as U. S. Grade A and U. S. Grade B.

3. *Facilities.* Many members of the fresh fruit and vegetable industry will have to have more cold-storage facilities if they are to avoid waste, keep their merchandise in proper condition, and cut costs. Consumers frequently say that they prefer canned or frozen peas because the fresh peas they buy are "poor." Some of these complaints have no foundation, but some (resulting from improper handling of peas) have. Peas that are harvested at the proper state of maturity, promptly precooled, refrigerated to destination, and then held in wholesale and retail distributive channels under low-enough refrigeration, should reach the housewife in proper condition and still have the fresh garden flavor. But if the temperature of the peas rises, sugars are converted into starches, the peas lose their flavor, and the consumer complains.

Much of this can be eliminated. Shrinkage losses could be cut materially and goods delivered looking better and in much better condition if the goods were moved from refrigerator cars into refrigerated storage. This might require a considerable capital outlay to accomplish, but the possibility should be investigated. Priorities on the needed equipment might not now be available, but at any rate plans could be made.

Duplicate lots of vegetables were recently studied in an attempt to ascertain the losses in weight of the products during the first 5 days after they were placed on sale, and to observe salability and/or appearance. One of the two lots of each vegetable was sold under refrigeration, and the other not. It was found that tomatoes sold under refrigeration lost no appreciable weight or quality during the period, whereas the nonrefrigerated tomatoes lost 4 percent in weight and 50 percent in appearance.

Spinach packed in moistureproof cellophane lost no weight and retained 90 percent of its original appearance, but the unrefrigerated sample, which lost 29 percent in weight in 48 hours, was worthless after a few days.

Refrigerated broccoli held 90 percent of its original appearance, whereas the duplicate sample was unsalable. Tests on parsley were approximately the same. Head lettuce and cauliflower were 100 percent salable at the end of the 5 days, as against only 50 percent for the unrefrigerated sample. Green beans were 100 percent salable, but the unrefrigerated sample was valueless.

4. *Grading.* The industry might well consider the labeling, stamping, or tagging of every package with the grade--U. S. No. 1, U. S. Grade A,



U. S. Consumers, and so on--for the information of consumers, making it easy for them to buy the products.

Besides considering these four things, fresh fruit and vegetable people will find it advantageous to learn just how the Perishable Agricultural Commodities Act can best serve their purposes. These people are licensed under that law and must operate under it, but many of them are not enjoying all its benefits. For example, they can benefit by making *written* contracts with shippers, setting forth clearly each feature of the agreement. People in the Office of Marketing Services regulatory offices are on call to assist them in developing trouble-free contracts that may avoid disputes later.

Still another source of help and profit to the industry is fuller use of up-to-the-minute market information, such as that provided by the Market News Service. The daily Market News reports, which are available for the asking and provide facts on which to base daily trading operations, cover shipments, receipts, track holdings, prices, and comments on specific or general market conditions.

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BUTTER ORDER AMENDED

Effective April 1, WFA has amended the butter set-aside order (WFO 2), to provide for reauthorization of butter receivers, and to move up by 1 year the start of the period used to determine which creameries will be subject to the order.

Previous authorizations to receive butter set aside under WFO 2 expired March 31. Persons wishing to act as receivers for set-aside butter after that date must be reauthorized. The start of the base period is changed so that the question whether a manufacturer's production is large enough to require him to set aside part of his production for war purposes may be determined on the basis of more recent production data. The new base period begins April 1, 1944.

For those manufacturers who produced more than 12,000 pounds of butter in any month since the start of the new base period, the set-aside quotas for April and May, as recently announced by the WFA, are 40 and 55 percent respectively of monthly production. Manufacturers who produce 12,000 pounds in any month after March 1945 are to set aside the applicable percentage in each subsequent month.

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Because military requirements for edible fats and oils continue to increase, WFA has found it necessary to amend WFO 42 to reduce from 85 to 83 percent (of average use in 1940 and 1941) the quantity of these oils available for the manufacture of civilian shortening, cooking, and salad oils. The amendment is effective April 1, 1945.

DRY MILK SET-ASIDE QUOTA INCREASED

WFA has fixed the set-aside quota for spray nonfat dry milk solids at 75 percent of production during April and May. During February and March the requirement was 50 percent of production.

The increased set-aside accords with the policy of operating the set-aside program on the basis of adjusting quotas with changes in seasonal production. This plan makes it possible for the supplies of spray powder for civilian use to flow into civilian trade channels in fairly even monthly quantities.

Production of spray nonfat powder during 1945 is expected to be substantially increased over the 267 million pounds produced during 1944; consequently the supplies for civilian use during April and May will be somewhat larger than in the same months last year, when the set-aside also was 75 percent of production.

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WFA INCREASES UTILITY BEEF SET-ASIDE



WFA has increased the set-aside of Utility grade beef to 80 percent from the current 70 percent in a move to provide the armed forces with more canned meats. Effective April 1, this action (amendment 21 to WFO 75.2) applies to all packers operating under Federal inspection. The percentage increase makes the set-aside of Utility grade beef equal to that of Canner and Cutter grade beef which has been at 80 percent since last October 15.

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CALIFORNIA MARKETING AGREEMENT PROGRAM CONTINUED

The Federal marketing agreement and order regulating the handling of fresh Elberta peaches, plums, and Bartlett pears grown in California, approved by a majority of growers voting in a recent referendum, will continue in effect.

As required by provisions of the agreement, growers voted in a biennial referendum late in January. Continuance of the program was favored by 92 percent of the peach growers (93 percent of the tonnage) voting; 91 percent of the plum growers (94 percent of the tonnage) voting; and 93 percent of the pear growers (92 percent of the tonnage) voting. The program was in operation in California in 1942, but no regulations were established in 1943 and 1944 because prices to growers were above parity. Operation of the program in 1945 also will depend on grower prices.

ABOUT MARKETING:

The following reports and publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach, and mail to the Office of Marketing Services, War Food Administration, Washington 25, D. C.

Addresses:

What's Ahead for Dairy Farmers. February 26, 1945.
(processed) By Claude R. Wickard

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